RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/021,741B
Source: IFW16
Date Processed by STIC: 2/14/05

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/021,741B

CRF Edit Date: 2/15/05
Edited by: AL

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

_____

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

___ Deleted: ___ invalid beginning/end-of-file text ; ___ page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

_____

___ Moved responses to same line as heading/numeric identifier, specifically:

_____

✓ Other:
Sequence 2 - corrected spelling of "sapiens"

IFW16

RAW SEQUENCE LISTING DATE: 02/15/2005
PATENT APPLICATION: **US/10/021,741B** TIME: 11:24:30

Input Set : **N:\AMC\pto.amc.txt**
Output Set: **N:\CRF4\02152005\J021741B.raw**

<110> APPLICANT: University of North Texas Health Science Center at Fort Worth
Mathews, Porunellor A.
Boles, Kent
<120> TITLE OF INVENTION: Immuno activation of CS1 receptor in natural killer cells to inhibit tumor cell growth
<130> FILE REFERENCE: 120746.00004
<140> CURRENT APPLICATION NUMBER: 10/021,741B
<141> CURRENT FILING DATE: 2001-12-12
<160> NUMBER OF SEQ ID NOS: 5
<170> SOFTWARE: PatentIn version 3.3
<210> SEQ ID NO: 1
<211> LENGTH: 1083
<212> TYPE: DNA
<213> ORGANISM: Homo Sapiens
<300> PUBLICATION INFORMATION:
<301> AUTHORs: Boles,K.S. and Mathew,P.A.
<302> TITLE: Molecular cloning of CS1, a novel human natural killer cell
<303> JOURNAL: Immunogenetics
<304> VOLUME: 52
<305> ISSUE: (3-4)
<306> PAGES: 302-307
<307> DATE: 2001
<308> DATABASE ACCESSION NO: AF291815
<309> DATABASE ENTRY DATE: 2000-08-01
<313> RELEVANT RESIDUES: (1)..(1083)
<300> PUBLICATION INFORMATION:
<308> DATABASE ACCESSION NO: AF291815
<309> DATABASE ENTRY DATE: 2000-08-01
<313> RELEVANT RESIDUES: (1)..(1083)
<400> SEQUENCE: 1

cagagagcaa tatggctggt tccccaacat gcctcaccct catctatatc ctttggcagc 60
tcacagggtc agcagcctct ggacccgtga aagagctggt cggttccgtt ggtggggccg 120
tgactttccc cctgaagtcc aaagtaaagc aagttgactc tattgtctgg accttcaaca 180
caacccctct tgtcaccata cagccagaag ggggcactat catagtgacc caaaatcgta 240
atagggagag agtagacttc ccagatggag gctactccct gaagctcagc aaactgaaga 300
agaatgactc agggatctac tatgtgggga tatacagctc atcactccag cagccctcca 360
cccaggagta cgtgctgcat gtctacgagc acctgtcaaa gcctaaagtc accatgggtc 420
tgcagagcaa taagaatggc acctgtgtga ccaatctgac atgctgcatg gaacatgggg 480
aagaggatgt gatttatacc tggaaggccc tggggcaagc agccaatgag tcccataatg 540
ggtccatcct ccccatctcc tggagatggg gagaaagtga tatgaccttc atctgcgttg 600
ccaggaaccc tgtcagcaga aacttctcaa gccccatcct tgccaggaag ctctgtgaag 660
gtgctgctga tgacccagat tcctccatgg tcctcctgtg tctcctgttg gtgcccctcc 720

RAW SEQUENCE LISTING DATE: 02/15/2005
PATENT APPLICATION: US/10/021,741B TIME: 11:24:30

Input Set : N:\AMC\pto.amc.txt
Output Set: N:\CRF4\02152005\J021741B.raw

tgctcagtct ctttgtactg gggctatttc tttggtttct gaagagagag agacaagaag 780
agtacattga agagaagaag agagtggaca tttgtcggga aactcctaac atatgccccc 840
attctggaga gaacacagag tacgacacaa tccctcacac taatagaaca atcctaaagg 900
aagatccagc aaatacggtt tactccactg tggaaatacc gaaaaagatg gaaaatcccc 960
actcactgct cacgatgcca gacacaccaa ggctatttgc ctatgagaat gttatctaga 1020
cagcagtgca ctgcccctaa gtctctgctc aaaaaaaaaa caattctcgg cccaaagaaa 1080
aca 1083

<210> SEQ ID NO: 2
<211> LENGTH: 335
<212> TYPE: PRT
<213> ORGANISM: Homo Sapiens
<300> PUBLICATION INFORMATION:
<301> AUTHORs: Boles,K.S. and Mathew,P.A.
<302> TITLE: Molecular cloning of CS1, a novel human natural killer cell
<303> JOURNAL: Immunogenetics
<304> VOLUME: 52
<305> ISSUE: (3-4)
<306> PAGES: 302-307
<307> DATE: 2001
<308> DATABASE ACCESSION NO: AAK11549
<309> DATABASE ENTRY DATE: 2001-08-01
<313> RELEVANT RESIDUES: (1)..(335)
<300> PUBLICATION INFORMATION:
<308> DATABASE ACCESSION NO: AAK11549
<309> DATABASE ENTRY DATE: 2001-08-01
<313> RELEVANT RESIDUES: (1)..(335)
<400> SEQUENCE: 2

```
Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp Gln
1               5                  10                  15
Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val Gly Ser
            20                  25                  30
Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val Lys Gln Val
        35                  40                  45
Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu Val Thr Ile Gln
    50                  55                  60
Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn Arg Asn Arg Glu Arg
65                  70                  75                  80
Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu Lys Leu Ser Lys Leu Lys
                85                  90                  95
Lys Asn Asp Ser Gly Ile Tyr Tyr Val Gly Ile Tyr Ser Ser Ser Leu
            100                 105                 110
Gln Gln Pro Ser Thr Gln Glu Tyr Val Leu His Val Tyr Glu His Leu
        115                 120                 125
Ser Lys Pro Lys Val Thr Met Gly Leu Gln Ser Asn Lys Asn Gly Thr
    130                 135                 140
Cys Val Thr Asn Leu Thr Cys Cys Met Glu His Gly Glu Glu Asp Val
145                 150                 155                 160
Ile Tyr Thr Trp Lys Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn
                165                 170                 175
```

RAW SEQUENCE LISTING DATE: 02/15/2005
PATENT APPLICATION: US/10/021,741B TIME: 11:24:30

Input Set : N:\AMC\pto.amc.txt
Output Set: N:\CRF4\02152005\J021741B.raw

```
150 Gly Ser Ile Leu Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr
151             180                 185                 190
154 Phe Ile Cys Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro
155         195                 200                 205
158 Ile Leu Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser
159     210                 215                 220
162 Ser Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
163 225                 230                 235                 240
166 Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln Glu
167                 245                 250                 255
170 Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu Thr Pro
171             260                 265                 270
174 Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp Thr Ile Pro
175         275                 280                 285
178 His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala Asn Thr Val Tyr
179     290                 295                 300
182 Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn Pro His Ser Leu Leu
183 305                 310                 315                 320
186 Thr Met Pro Asp Thr Pro Arg Leu Phe Ala Tyr Glu Asn Val Ile
187                 325                 330                 335
190 <210> SEQ ID NO: 3
191 <211> LENGTH: 12
192 <212> TYPE: PRT
193 <213> ORGANISM: artificial sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: Peptide fragment of mAb for CS1 receptor.
198 <400> SEQUENCE: 3
200 Cys Gln Asn Arg Asn Arg Glu Arg Val Asp Phe Pro
201 1               5                   10
204 <210> SEQ ID NO: 4
205 <211> LENGTH: 11
206 <212> TYPE: PRT
207 <213> ORGANISM: artificial sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Peptide fragment of mAb for CS1 receptor.
212 <400> SEQUENCE: 4
214 Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr
215 1               5                   10
218 <210> SEQ ID NO: 5
219 <211> LENGTH: 16
220 <212> TYPE: PRT
221 <213> ORGANISM: artificial sequence
223 <220> FEATURE:
224 <223> OTHER INFORMATION: Peptide fragment of mAb for CS1 receptor.
226 <400> SEQUENCE: 5
228 Cys Gln Glu Glu Tyr Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
229 1               5                   10                  15
```

VERIFICATION SUMMARY DATE: 02/15/2005
PATENT APPLICATION: **US/10/021,741B** TIME: 11:24:31

Input Set : **N:\AMC\pto.amc.txt**
Output Set: **N:\CRF4\02152005\J021741B.raw**

IFW16

RAW SEQUENCE LISTING DATE: 02/15/2005
PATENT APPLICATION: US/10/021,741B TIME: 11:19:31

Input Set : N:\Crf4\02142005\J021741.raw
Output Set: N:\CRF4\02152005\J021741B.raw

<110> APPLICANT: University of North Texas Health Science Center at Fort Worth
Mathews, Porunellor A.
Boles, Kent
<120> TITLE OF INVENTION: Immuno activation of CS1 receptor in natural killer cells to inhibit tumor cell growth
<130> FILE REFERENCE: 120746.00004
<140> CURRENT APPLICATION NUMBER: US/10/021,741B
<141> CURRENT FILING DATE: 2001-12-12
<160> NUMBER OF SEQ ID NOS: 5
<170> SOFTWARE: PatentIn version 3.3
<210> SEQ ID NO: 1
<211> LENGTH: 1083
<212> TYPE: DNA
<213> ORGANISM: Homo Sapiens
<300> PUBLICATION INFORMATION:
<301> AUTHORS: Boles,K.S. and Mathew,P.A.
<302> TITLE: Molecular cloning of CS1, a novel human natural killer cell
<303> JOURNAL: Immunogenetics
<304> VOLUME: 52
<305> ISSUE: (3-4)
<306> PAGES: 302-307
<307> DATE: 2001
<308> DATABASE ACCESSION NO: AF291815
<309> DATABASE ENTRY DATE: 2000-08-01
<313> RELEVANT RESIDUES: (1)..(1083)
<300> PUBLICATION INFORMATION:
<308> DATABASE ACCESSION NO: AF291815
<309> DATABASE ENTRY DATE: 2000-08-01
<313> RELEVANT RESIDUES: (1)..(1083)
<400> SEQUENCE: 1

cagagagcaa tatggctggt tccccaacat gcctcaccct catctatatc ctttggcagc 60
tcacagggtc agcagcctct ggacccgtga aagagctggt cggttccgtt ggtggggccg 120
tgactttccc cctgaagtcc aaagtaaagc aagttgactc tattgtctgg accttcaaca 180
caacccctct tgtcaccata cagccagaag ggggcactat catagtgacc caaaatcgta 240
atagggagag agtagacttc ccagatggag gctactccct gaagctcagc aaactgaaga 300
agaatgactc agggatctac tatgtgggga tatacagctc atcactccag cagccctcca 360
cccaggagta cgtgctgcat gtctacgagc acctgtcaaa gcctaaagtc accatgggtc 420
tgcagagcaa taagaatggc acctgtgtga ccaatctgac atgctgcatg gaacatgggg 480
aagaggatgt gatttatacc tggaaggccc tggggcaagc agccaatgag tcccataatg 540
ggtccatcct ccccatctcc tggagatggg gagaaagtga tatgaccttc atctgcgttg 600
ccaggaaccc tgtcagcaga aacttctcaa gccccatcct tgccaggaag ctctgtgaag 660
gtgctgctga tgacccagat tcctccatgg tcctcctgtg tctcctgttg gtgcccctcc 720

Does Not Comply
Corrected Diskette Needed

p. 2

RAW SEQUENCE LISTING DATE: 02/15/2005
PATENT APPLICATION: **US/10/021,741B** TIME: 11:19:31

Input Set : **N:\Crf4\02142005\J021741.raw**
Output Set: **N:\CRF4\02152005\J021741B.raw**

tgctcagtct ctttgtactg gggctatttc tttggtttct gaagagagag agacaagaag 780
agtacattga agagaagaag agagtggaca tttgtcggga aactcctaac atatgccccc 840
attctggaga gaacacagag tacgacacaa tccctcacac taatagaaca atcctaaagg 900
aagatccagc aaatacggtt tactccactg tggaaatacc gaaaaagatg gaaaatcccc 960
actcactgct cacgatgcca gacacaccaa ggctatttgc ctatgagaat gttatctaga 1020
cagcagtgca ctgcccctaa gtctctgctc aaaaaaaaaa caattctcgg cccaaagaaa 1080
aca 1083

<210> SEQ ID NO: 2
<211> LENGTH: 335
<212> TYPE: PRT
<213> ORGANISM: Homo Sapens
<300> PUBLICATION INFORMATION:
<301> AUTHORS: Boles,K.S. and Mathew,P.A.
<302> TITLE: Molecular cloning of CS1, a novel human natural killer cell
<303> JOURNAL: Immunogenetics
<304> VOLUME: 52
<305> ISSUE: (3-4)
<306> PAGES: 302-307
<307> DATE: 2001
<308> DATABASE ACCESSION NO: AAK11549
<309> DATABASE ENTRY DATE: 2001-08-01
<313> RELEVANT RESIDUES: (1)..(335)
<300> PUBLICATION INFORMATION:
<308> DATABASE ACCESSION NO: AAK11549
<309> DATABASE ENTRY DATE: 2001-08-01
<313> RELEVANT RESIDUES: (1)..(335)
<400> SEQUENCE: 2

Met Ala Gly Ser Pro Thr Cys Leu Thr Leu Ile Tyr Ile Leu Trp Gln
1 5 10 15
Leu Thr Gly Ser Ala Ala Ser Gly Pro Val Lys Glu Leu Val Gly Ser
20 25 30
Val Gly Gly Ala Val Thr Phe Pro Leu Lys Ser Lys Val Lys Gln Val
35 40 45
Asp Ser Ile Val Trp Thr Phe Asn Thr Thr Pro Leu Val Thr Ile Gln
50 55 60
Pro Glu Gly Gly Thr Ile Ile Val Thr Gln Asn Arg Asn Arg Glu Arg
65 70 75 80
Val Asp Phe Pro Asp Gly Gly Tyr Ser Leu Lys Leu Ser Lys Leu Lys
85 90 95
Lys Asn Asp Ser Gly Ile Tyr Tyr Val Gly Ile Tyr Ser Ser Ser Leu
100 105 110
Gln Gln Pro Ser Thr Gln Glu Tyr Val Leu His Val Tyr Glu His Leu
115 120 125
Ser Lys Pro Lys Val Thr Met Gly Leu Gln Ser Asn Lys Asn Gly Thr
130 135 140
Cys Val Thr Asn Leu Thr Cys Cys Met Glu His Gly Glu Glu Asp Val
145 150 155 160
Ile Tyr Thr Trp Lys Ala Leu Gly Gln Ala Ala Asn Glu Ser His Asn
165 170 175

RAW SEQUENCE LISTING DATE: 02/15/2005
PATENT APPLICATION: US/10/021,741B TIME: 11:19:31

Input Set : N:\Crf4\02142005\J021741.raw
Output Set: N:\CRF4\02152005\J021741B.raw

```
95       Gly Ser Ile Leu Pro Ile Ser Trp Arg Trp Gly Glu Ser Asp Met Thr
96                   180                 185                 190
97       Phe Ile Cys Val Ala Arg Asn Pro Val Ser Arg Asn Phe Ser Ser Pro
98               195                 200                 205
99       Ile Leu Ala Arg Lys Leu Cys Glu Gly Ala Ala Asp Asp Pro Asp Ser
100          210                 215                 220
101       Ser Met Val Leu Leu Cys Leu Leu Leu Val Pro Leu Leu Leu Ser Leu
102       225                 230                 235                 240
103       Phe Val Leu Gly Leu Phe Leu Trp Phe Leu Lys Arg Glu Arg Gln Glu
104                       245                 250                 255
105       Glu Tyr Ile Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu Thr Pro
106                   260                 265                 270
107       Asn Ile Cys Pro His Ser Gly Glu Asn Thr Glu Tyr Asp Thr Ile Pro
108               275                 280                 285
109       His Thr Asn Arg Thr Ile Leu Lys Glu Asp Pro Ala Asn Thr Val Tyr
110          290                 295                 300
111       Ser Thr Val Glu Ile Pro Lys Lys Met Glu Asn Pro His Ser Leu Leu
112       305                 310                 315                 320
113       Thr Met Pro Asp Thr Pro Arg Leu Phe Ala Tyr Glu Asn Val Ile
114                       325                 330                 335
116 <210> SEQ ID NO: 3
117 <211> LENGTH: 12
118 <212> TYPE: PRT
119 <213> ORGANISM: artificial sequence
120 <220> FEATURE:
121 <223> OTHER INFORMATION: Peptide fragment of mAb for CS1 receptor.
122 <400> SEQUENCE: 3
123       Cys Gln Asn Arg Asn Arg Glu Arg Val Asp Phe Pro
124       1               5                   10
126 <210> SEQ ID NO: 4
127 <211> LENGTH: 11
128 <212> TYPE: PRT
129 <213> ORGANISM: artificial sequence
130 <220> FEATURE:
131 <223> OTHER INFORMATION: Peptide fragment of mAb for CS1 receptor.
132 <400> SEQUENCE: 4
133       Cys Met Glu His Gly Glu Glu Asp Val Ile Tyr
134       1               5                   10
136 <210> SEQ ID NO: 5
137 <211> LENGTH: 16
138 <212> TYPE: PRT
139 <213> ORGANISM: artificial sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: Peptide fragment of mAb for CS1 receptor.
142 <400> SEQUENCE: 5
143       Cys Gln Glu Glu Tyr Glu Glu Lys Lys Arg Val Asp Ile Cys Arg Glu
144       1               5                   10                  15
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/15/2005
PATENT APPLICATION: **US/10/021,741B** TIME: 11:19:32

Input Set : **N:\Crf4\02142005\J021741.raw**
Output Set: **N:\CRF4\02152005\J021741B.raw**

Invalid Line Length:
The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 5

VERIFICATION SUMMARY DATE: 02/15/2005
PATENT APPLICATION: **US/10/021,741B** TIME: 11:19:32

Input Set : **N:\Crf4\02142005\J021741.raw**
Output Set: **N:\CRF4\02152005\J021741B.raw**